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CORRESPONDENCE

Letters to the Editor

Aspirin Plus Clopidogrel Versus Aspirin Alone After Coronary Artery Bypass Grafting

We read with interest the paper by Gao et al. (1) relating to the use of clopidogrel and aspirin after coronary artery bypass grafting (CABG) surgery. As the authors point out, adding clopidogrel or other $P2Y_{12}$ receptor antagonists to aspirin may make antiplatelet therapy more effective and may act as a safety net for CABG patients with aspirin resistance. This may translate into improved graft patency—a benefit that has been demonstrated in coronary-stent recipients, for whom clopidogrel therapy reduces the risk of stent thrombosis. Another potential benefit of clopidogrel in CABG patients may be a reduction in the risk or severity of native coronary or cerebral arterial events.

The authors concluded that "aspirin plus clopidogrel is more effective in venous graft patency than aspirin alone." The study was not designed to, and could not, address the important question of how dual antiplatelet therapy affects major adverse cardiac and cerebrovascular events. What is striking, however, is the absence of data relating to bleeding, which is the main adverse effect of such therapy. It would be interesting to know whether there was an increase in re-explorations for bleeding, cases of pericardial effusion, transfusion requirements, chest tube output, or nonsurgical bleeding episodes in the dual-therapy arm.

The ideal antiplatelet therapy for optimizing graft patency and outcomes after CABG remains uncertain, and we agree with the authors that a larger randomized controlled trial with longer follow-up is needed to evaluate the comparative effectiveness of monotherapy with aspirin versus dual therapy with aspirin and a $P2Y_{12}$ receptor antagonist in patients who have undergone CABG. Future studies ideally should incorporate pharmacogenetic analysis, because different patients may require different antiplatelet regimens.

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Reply

We thank Drs. Bakaeen and Chu for their comments regarding our paper (1). In fact, we have not observed any statistical difference in major adverse cardiac and cerebrovascular events between the dual antiplatelet group and the aspirin-only group at post-operative month 3, and the same is true of the post-operative pleural effusion, transfusion requirements, or nonsurgical bleeding groups. We did not evaluate platelet function; consequently, individual variability in the antiplatelet therapy was not taken into account. However, being consistent with your suggestion, we believe that this issue should be a direction for future studies.

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